

REMARKS

A. INTRODUCTION

The Final Office Action has been received and carefully considered. Claims 1-21 are pending in the application. In this response, no amendment has been made to the claims or other parts of the application. A Listing of the claims is attached at Appendix B. Applicant still believes that the application is in condition for allowance and notice thereof is respectfully requested.

B. THE REJECTION UNDER 35 U.S.C. § 103

In page 2 of the Final Office Action, claims 1-8, 13-14, 16-19 and 21 are rejected under 35 U.S.C. §103(a) as being unpatentable over Donath *et al.* (“Visualizing Conversation,” hereinafter “Donath”) in view of Farmer *et al.* (US Patent 6,476,830, hereinafter “Farmer”). In page 4 of the Final Office Action, claims 9-12, 15 and 20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Donath in view of Farmer and further in view of Chi *et al.* (US Patent 6,509,898, hereinafter “Chi”). These rejections are respectfully traversed.

Under 35 U.S.C. § 103, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. In re Fine, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). As stated in M.P.E.P. § 2143.01, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 984, 180 U.S.P.Q. 580 (CCPA 1974).

In rejecting independent claims 1, 5, 9, 13 and 16, the Examiner relies heavily on the following passages from Donath as disclosing all the claimed limitations except for the “diversity measure”:

“Figure 3 shows two screen shots¹ from a Chat Circles session. Each person who is connected to the chat's server appear as a circle. When the user posts a message, their circle grows and accommodates the text inside it. Postings are displayed for a few seconds (the exact time varies depending on the length of each posting) after which they gradually fade into the background. This approach mimics real life conversations where at any given time the focus is on the words said by the person who spoke last. Over time, those words dissipates the conversation evolves. The sequence of growing and shrinking circles creates a pulsating rhythm on the screen that reflects the turn taking of regular conversations.” Donath: page 3, ll. 12-18.

“One's overall level of activity is conveyed through the brightness of one's circle, the recently active being brightest and the idle ones dimmest. As we mentioned earlier, one of the benefits of graphical chats is that participants can see the size of the conversational group, unlike in text-based ones, where the lurkers are invisible. Yet the appearance of a crowded, avatar-filled room is misleading if most of those depicted are not contributing - and may, in reality, be far from their computers. By fading the circles of non-participants, Chat Circles can indicate both the overall number of connected users and the actual level of presence and activity.” Donath: page 3, ll. 31-37.

The Examiner alleges that the first cited passage discloses the following limitations as claimed:

- (i) “determining a connectivity measure for each unit of individual persons,”
- (ii) “providing a graphical object corresponding to each unit of individual persons,”
- (iii) “positioning said graphical objects to correspond to the relative positions of the units of individual persons within the organizational hierarchy,” and
- (iv) “displaying on a display screen said graphical objects and interactions between the units of individual persons represented by said graphical objects.”

The Examiner further alleges that the second cited passage discloses the following limitation as claimed:

- (v) “varying graphical properties of said graphical objects to correspond to the connectivity measure ...”

¹ The two screen shots are shown in Appendix A.

As will become apparent in the following discussion, Donath does not disclose all the above-listed limitations.

First, Donath does not disclose a “connectivity measure” or a step of “determining a connectivity measure for each unit of individual persons” as presently claimed. As explained in Applicant’s Specification, “Connectivity is a measure for assessing how well entities are connected to their environments.” Page 6, ll. 12-13. “Generally, the connectivity measure is a recursive measure that uses an appropriate decay factor for accounting the effects of indirect connections (or interactions) up to a certain level of depth.” Page 6, ll. 15-19. Donath does not disclose such a “connectivity measure” at all.

Donath discloses a graphical interface (“Chat Circles”) for visualizing conversations in an online chat-room, wherein each participant is represented by a colored circle and his/her messages are temporarily displayed within the circle. *See*, Donath: page 3, “The conversational interface.” Each circle has a “zone of hearing” around it, and it can only see the words displayed in those circles within the zone. Therefore, in order to follow a conversation, a participant must move his/her circle close to other circles who are part of that conversation. *See*, Donath: page 4, first paragraph. For example, in Figure 3 of Donath (Appendix A), the two screen shots represent what one of the participants “Kate” (solid red circle that shows “hello! I am kate”) sees. As Kate moves her own circle from one discussion group to another, she can only see the messages displayed in her nearby circles.

As interesting a graphical interface as it is, Donath does not teach or suggest a “connectivity measure” or how to determine the same. Donath provides two mechanisms: a graphical representation of chat room members as circles, and a “zone of hearing” for each circle, which mechanisms, coupled with individual members’ movement of their own circles,

cause clusters of circles to be displayed on a screen. Perhaps, by looking at the Chat Circles screen, a human viewer might glean a qualitative impression of multiple discussions and their respective participants (i.e., circles). In that sense, one might consider each group of participants “connected” as they all seem interested in the same topic. Yet, Donath itself does not disclose any “connectivity measure” as claimed. Donath describes a “zone of hearing” which defines how close two circles must be before they can “hear” each other. Such a “zone of hearing” is not a “connectivity measure” (i.e., a measure of how well the two circles are connected), but a predetermined parameter that might affect their interactions. That is, with respect to interactions among the circles, the “zone of hearing” is something that affects or causes changes in how the circles interact. A “connectivity measure” is something that gauges the changes in the interactions. In other words, to consider their relative timing, the “zone of hearing” comes first, causing changes in the interactions among the circles; and the “connectivity measure” comes later, to measure the interactions.

Second, Donath does not teach or suggest “varying graphical properties of said graphical objects to correspond to the connectivity measure.” The Examiner asserts that Donath, in the last paragraph of page 3 (lines 31-37), discloses this limitation. In that paragraph, Donath does teach varying graphical properties (e.g., brightness) of graphical objects (i.e., circles). However, the graphical properties in Donath are not varied “to correspond to the connectivity measure” as presently claimed. A closer look at this paragraph will show that the brightness of one’s circle corresponds to one’s “overall level of activity” (line 31) or “the actual level of presence and activity” (line 37), which are not to be confused with “the connectivity measure” as claimed.

The Examiner concedes that Donath fails to disclose “a diversity measure,” but asserts that Farmer discloses the same in the following passage:

“Avatar 100 can also change or enhance its appearance by using a body changer machine to transform the body of avatar 100 to another one of the available body types. At any given instant, avatar 100 can have only a single body. In contrast, avatar 100 can possess any number of heads, but only one head at a time can be mounted on the body, i.e., worn. Avatar 100 must purchase the heads from a virtual head vending machine object, or obtain the head from another avatar. In this embodiment, an avatar starts in the virtual world with a female gender and a neutral mood. However, on-line user 225-1 selects a gender of avatar 100 and one of three body styles, average, athletic, and chubby, for that gender. The body style can be changed at any time by using the body changer machine.” Farmer: col. 12, ll. 30-45.

The Examiner found it significant that “the gender is specified for each person.” Final Office Action: pages 3 and 5. It appears that the Examiner considers “gender” as a “diversity measure” as claimed.

Applicant respectfully submits that the Examiner’s reliance on Farmer is misplaced. As defined in Applicant’s Specification, “Diversity is a measure for assessing how diverse entities are in their interactions with or connections to their environment.” Page 7, ll. 8-10. It should be noted that that the “diversity measure” as claimed pertains to the diversity of an entity’s interactions with its environment, rather than the diversity of the entity itself. The alleged “diversity measures” that the Examiner finds in Farmer, such as gender, mood, body type and heads, all reflect the properties of an avatar itself but have nothing to do with the user’s or the avatar’s interactions with others. The Examiner asserts that the motivation for combining Farmer with Donath is to “provide a way to more accurately portray a user,” which assertion illustrates the Examiner’s misunderstanding of the term “diversity measure” as claimed. The diversity measure portrays not an entity itself but the entity’s interactions or connections with its environment.

For at least the foregoing reasons, the combination of Donath and Farmer fails to disclose all the claim elements in the present invention. As such, the further combination with Chi does

not render the claimed invention obvious, either. Withdrawal of the obviousness rejections is respectfully requested.

C. CONCLUSION

For at least the reasons provided above, Applicant respectfully submits that the application is in condition for allowance. Favorable reconsideration and allowance of the pending claims are respectfully solicited.


Should there be anything further required to place the application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below before issuance of any further office action.

In the event any additional fees are due, the Commissioner is hereby authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

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APPENDIX A.

